

Title: Family Medicine Physician-Scientists are Jewels to Be Developed

Article Type – Essay or opinion piece (?)

Summary (100-150 word limit – current 264):

The counterculture heritage of family medicine was an important aspect of what makes our specialty central to medical care delivery but must evolve away from a resistance to including scientific rigor among standard pathways to becoming a member of the specialty.¹ The traditional focus on patient centered care and away from a reductionistic view of medical services within generalism is central to family medicine.² The common view in medical education that planning a career in rigorous scientific investigation runs counter to exploring a career in that specialty has hampered the impact of primary care on the creation of an evidence base to inform its own practice – ironically relying on sub-specialties to provide the knowledge so valued for evidence based practice. A key point in the traditional pathway to a physician scientist career in medicine is the selection of specialty by medical students planning to have research comprise a major component of their careers; these may include those who have completed graduate degrees in research fields before coming into medical training or during that process (i.e., MD-PhD programs) or are planning fellowships after residency³. While pathways to successful scientific careers can vary the current lack of attention to this foundational source of physician scientists is likely having an outsized negative impact on the expansion of this critical workforce. We call for ongoing efforts to build physician scientist pathways in family medicine to add greater focus on this transition point in medical education to counter this mistaken view that those interested in rigorous scientific careers should not choose family medicine.

Main Article Text

- I. Introduction
 - a. History of FM as anti-reductionist^{1,2}
 - b. Lack of substantial progress in increasing NIH funded research in last decade
 - i. Using this not in exclusion of other funding sources but as a “coin of the realm” common SOM metric
 - ii. BRIMR Data – NIH rankings of departments^{4,5}
 1. No increase from 2003-2023 – and actual reduction in inflation adjusted dollars (can report this based on ADFM Fellowship project – Bennett)
 - c. Substantial efforts by specialty to increase Research Capacity
 - i. Based on recognition of need⁴
 - d. Existing bias against FM as a specialty for physician scientists
 - i. Both within and outside the specialty
 - ii. Attitudes influence specialty choices
 - e. Need to include physician scientists from FM to influence evidence base
- II. Established Pathway to Physician Scientist Career – primary source of physician scientists
 - a. Medical students with interest in a research career
 - i. Those who select medicine but plan on a substantial research career
 - ii. Undergraduate or other life experiences
 - b. MD-PhD or other combined degree programs (with rigorous scientific focus)
 - c. Residencies with research tracks
 - d. Rigorous fellowships focused on NIH funded research careers

- e. Career development awards
 - i. K series in NIH Institutes and AHRQ
 - f. Mentored work with senior investigators
- III. Possible Interventions
- a. Need to increase efforts at leading departments of FM for medical students
 - i. Longitudinal research experiences
 - ii. Coordination between medical student educators and researchers
 - iii. Prioritization and incentivization by department chairs
 - b. Increase efforts at national conferences focused on medical education and separately research
 - i. AAFP medical student conference
 - ii. STFM
 - iii. NAPCRG
- IV. Summary

The recognition that physician scientists are critical to the field of family medicine requires countering an anti-research bias both within and without the specialty. Additional attention to targeting the recruitment of research-oriented medical students into family medicine would align with standard sources of physician scientists within medical specialties broadly.

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3. Straus SE, Straus C, Tzanetos K, Intl Campaign Revitalise Acad M. Career choice in academic medicine: Systematic review. *Journal of General Internal Medicine*. Dec 2006;21(12):1222-1229. doi:10.1111/j.1525-1497.2006.00599.x
4. Ewigman B, Davis A, Vansaghi T, et al. BUILDING RESEARCH & SCHOLARSHIP CAPACITY IN DEPARTMENTS OF FAMILY MEDICINE: A NEW JOINT ADFM-NAPCRG INITIATIVE. *Annals of Family Medicine*. Jan-Feb 2016;14(1):82-83. doi:10.1370/afm.1901
5. Rabinowitz HK, Becker JA, Gregory ND, Wender RC. NIH funding in family medicine: An analysis of 2003 awards. *Annals of Family Medicine*. Sep-Oct 2006;4(5):437-442. doi:10.1370/afm.555